N: _____ D: _____ P: 1 2 3 4 5 6

Algebra 2 // 3.6 Practice // **Practice 3** *Mission Hills Math 2013*

Directions: Solve the following 3 variable systems

1. $\begin{cases} x - 2y - 3z = 1 \\ y - 3z = -10 \\ 2z = 6 \end{cases}$

2. $\begin{cases} z = 7 \\ y + 2z = 17 \\ x - 3y - 4z = -32 \end{cases}$

3. $\begin{cases} 2x - 3y + z = -4 \\ 2y + 3z = 9 \\ -2z = -2 \end{cases}$

4. $\begin{cases} 4x + 2y = 12 \\ -x + z = -2 \\ y + z = -4 \end{cases}$

5. $\begin{cases} 2x - 5y = 23 \\ x - z = 9 \\ z + y = -8 \end{cases}$

6. $\begin{cases} 3x + 2y = 4 \\ 2x - 6z = -14 \\ y + 3z = 8 \end{cases}$

7. $\begin{cases} 2x + 6y - 4z = 8 \\ 3x + 10y - 7z = 12 \\ -2x - 6y + 5z = -3 \end{cases}$

8. $\begin{cases} 2x - y + 3z = 8 \\ x - 6y - z = 0 \\ -2x + y - 3z = 8 \end{cases}$

9. $\begin{cases} -x + y - 3z = -4 \\ 3x - 2y + 8z = 14 \\ 2x - 2y + 5z = 7 \end{cases}$

10. $\begin{cases} x - 2y + 3z = -1 \\ 2 + 2x = -6z + 4y \\ 3x - 6y + 9z = -3 \end{cases}$

11. $\begin{cases} x + y + z = -4 \\ 2x - 3y + z = 17 \\ x + 2y - 2z = -9 \end{cases}$

12. $\begin{cases} x + y - 2z = 5 \\ x + 2y + z = 8 \\ 2x + 3y - z = 13 \end{cases}$

13. $\begin{cases} x + y - 2z = 5 \\ x + 2y + z = 8 \\ 2x + 3y - z = 1 \end{cases}$

**14 $\begin{cases} 2w + 3x - 4y + z = 0 \\ w + x - 2y + z = 1 \\ -2w - x + y - z = -4 \\ 3w + x + 2y + z = 11 \end{cases}$